



BIOLOGY

NCERT - NCERT BIOLOGY(TELUGU)

EXCRETION - THE WASTAGE DISPOSING SYSTEM

Think And Discuss

1. Do cells need excretion ?

 [Watch Video Solution](#)

2. Why we advised to take sufficient water?

 [Watch Video Solution](#)

3. Why do some children pass urine during sleep at night until 15 or 16 years of age?

 [Watch Video Solution](#)

4. Why are weeds and wild plants not affected by insects and pests?

 [Watch Video Solution](#)

5. Do cells need excretion ?

 [Watch Video Solution](#)

6. Why we advised to take sufficient water?

 [Watch Video Solution](#)

7. Why do some children pass urine during sleep at night until 15 or 16 years of age?

 [Watch Video Solution](#)

8. Why weeds and wild plants are not affected by insects and pests?

 [Watch Video Solution](#)

Improve Your Learning

1. What is meant by excretion?

 [Watch Video Solution](#)

2. How are waste products excreted in amoeba ?

 [Watch Video Solution](#)

3. Name different excretory organs in human body and excretory material generated by them?

 [Watch Video Solution](#)

4. Deepak said that 'Nephrons are functional and structural units of kidneys' . How will you support him?

 [Watch Video Solution](#)

5. How do plants manage the waste materials?

 [Watch Video Solution](#)

6. Why do some people need to use a dialysis machine? Explain the principal involved





[Watch Video Solution](#)

7. What is meant by osmoregulation? How is it maintained in human body?



[Watch Video Solution](#)

8. Do you find any relationship between circulatory system and excretory system? What are they?



[Watch Video Solution](#)

9. Give reasons.

Always vasopressin is not secreted.



[Watch Video Solution](#)

10. Give reasons.

When urine is discharged, in beginning it is acidic in nature later it become alkaline.

 [Watch Video Solution](#)

11. Give reasons.

Diameter of afferent arteriole is bigger than efferent arteriole.

 [Watch Video Solution](#)

12. Give reasons.

Urine is slightly thicker in summer than in winter.

 [Watch Video Solution](#)

13. Write differences between,

A. Functions of PCT and DCT

 [Watch Video Solution](#)

14. Write difference

Kidney and artificial kidney

 [Watch Video Solution](#)

15. Write difference

Excretion and secretion

 [Watch Video Solution](#)

16. Write difference

Primary metabolites and secondary metabolites



 [Watch Video Solution](#)

17. There is a pair of bean-shaped organs 'P' in the human body towards the back, just above the waist. A waste product 'Q' formed by the decomposition of unused proteins in liver is brought into organ 'P' through blood by an artery "R". The numerous tiny filters 'S' present in organ 'P' clean the dirty blood goes into circulation through a vein 'T'. The waste substance 'Q' and other waste salts and excess water form a yellowish liquid 'U' which goes from organ 'P' into a bag like structure 'V' through two tubes 'W'. This liquid is then thrown out of the body through a tube 'X'.

What is (i) organ P and (ii) waste substance Q.

 [Watch Video Solution](#)

18. There is a pair of bean-shaped organs 'P' in the human body towards the back, just above the waist. A waste product 'Q' formed by the decomposition of unused proteins in liver is brought into organ 'P'

through blood by an artery "R". The numerous tiny filters 'S' present in organ 'P' clean the dirty blood goes into circulation through a vein 'T'. The waste substance 'Q' and other waste salts and excess water form a yellowish liquid 'U' which goes from organ 'P' into a bag like structure 'V' through two tubes 'W'. This liquid is then thrown out of the body through a tube 'X'.

Name (i) artery R and (ii) vein T.



[Watch Video Solution](#)

19. There is a pair of bean-shaped organs 'P' in the human body towards the back, just above the waist. A waste product 'Q' formed by the decomposition of unused proteins in liver is brought into organ 'P' through blood by an artery "R". The numerous tiny filters 'S' present in organ 'P' clean the dirty blood goes into circulation through a vein 'T'. The waste substance 'Q' and other waste salts and excess water form a yellowish liquid 'U' which goes from organ 'P' into a bag like structure 'V' through two tubes 'W'. This liquid is then thrown out of the body

through a tube 'X'.

What are tiny filters S known as?

 [Watch Video Solution](#)

20. There is a pair of bean-shaped organs 'P' in the human body towards the back, just above the waist. A waste product 'Q' formed by the decomposition of unused proteins in liver is brought into organ 'P' through blood by an artery "R". The numerous tiny filters 'S' present in organ 'P' clean the dirty blood goes into circulation through a vein 'T'. The waste substance 'Q' and other waste salts and excess water form a yellowish liquid 'U' which goes from organ 'P' into a bag like structure 'V' through two tubes 'W'. This liquid is then thrown out of the body through a tube 'X'.

Name (i) liquid (ii) structure V (iii) tubes W (iv) tube X.

 [Watch Video Solution](#)

21. The organ 'A' of a person has been damaged completely due to a poisonous waste material 'B' has started accumulation in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance 'E' which are kept in coiled form in a tank containing solution 'F'. This solution contains three materials 'G', 'H' and 'I' similar proportions to those in normal blood. As the person's blood passes through long tubes of substance 'E', most of the wastes present in it go into solution 'F'. The clean blood is then put back into a vein in the person for circulation

What is organ A?



[Watch Video Solution](#)

22. The organ 'A' of a person has been damaged completely due to a poisonous waste material 'B' has started accumulation in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance 'E' which are kept in coiled form in a tank containing solution 'F'. This

solution contains three materials 'G', 'H' and 'I' similar proportions to those in normal blood. As the person's blood passes through long tubes of substance 'E', most of the wastes present in it go into solution 'F'. The clean blood is then put back into a vein in the person for circulation

Name the wastes substance B.

 [Watch Video Solution](#)

23. The organ 'A' of a person has been damaged completely due to a poisonous waste material "B" has started accumulation in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance 'E' which are kept in coiled form in a tank containing solution "F". This solution contains three materials 'G', 'H' and 'I' similar proportions to those in normal blood. As the person's blood passes through long tubes of substance 'E', most of the wastes present in it go into solution 'F'. The clean blood is then put back into a vein in the person for circulation

What are (i) E, and (ii) F?

 [Watch Video Solution](#)

24. The organ 'A' of a person has been damaged completely due to a poisonous waste material 'B' has started accumulation in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance 'E' which are kept in coiled form in a tank containing solution 'F'. This solution contains three materials 'G', 'H' and 'I' similar proportions to those in normal blood. As the person's blood passes through long tubes of substance 'E', most of the wastes present in it go into solution 'F'. The clean blood is then put back into a vein in the person for circulation

What is organ A?



[Watch Video Solution](#)

25. The organ 'A' of a person has been damaged completely due to a poisonous waste material 'B' has started accumulation in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance 'E'

which are kept in coiled form in a tank containing solution 'F'. This solution contains three materials 'G', 'H' and 'I' and similar proportions to those in normal blood. As the person's blood passes through long tubes of substance 'E', most of the wastes present in it go into solution 'F'. The clean blood is then put back into a vein in the person for circulation.

What is the process described above known as ?

 [Watch Video Solution](#)

26. Imagine what happens if waste materials are not sent out of the body from time to time.

 [Watch Video Solution](#)

27. To keep your kidneys healthy for long period what questions will you ask a nephrologist/urologist?

 [Watch Video Solution](#)

28. What are the gum yielding trees in your surroundings ? What procedure should you follow to collect gum from trees?

 [Watch Video Solution](#)

29. Collect the information about uses of different kinds of alkaloids, take help of Library or internet.

 [Watch Video Solution](#)

30. Draw a neat labelled diagram of L.S of kidney.

 [Watch Video Solution](#)

31. Describe the structure of nephron with the help of diagram.

 [Watch Video Solution](#)

32. Draw a block diagram showing the pathway of excretory system in human beings.

 [Watch Video Solution](#)

33. If you want to explain the process of filtration in kidney what diagram you need to draw.

 [Watch Video Solution](#)

34. List out the things that make you amazing in excretory system of human being.

 [Watch Video Solution](#)

35. You read about 'Brain dead' in this chapter. What discussions would you like to have when you think so ?

 [Watch Video Solution](#)

36. We people have very less awareness about organ donation, to motivate people write slogans about donation.

 [Watch Video Solution](#)

37. After learning this chapter (Excretion - The wastage disposing system) what habits would you like to change or follow for proper functioning of kidneys ?

 [Watch Video Solution](#)

38. What is meant by excretion?

 [Watch Video Solution](#)

39. How are waste products excreted in amoeba?



[Watch Video Solution](#)

40. Name different excretory organs in human body and excretory material generated by them?



[Watch Video Solution](#)

41. Deepak said that 'Nephrons are functional units of kidneys' how will you support him?



[Watch Video Solution](#)

42. How do plants manage the waste materials?



[Watch Video Solution](#)

43. Why do some people need to use a dialysis machine? Explain the principal involved

 [Watch Video Solution](#)

44. What is meant by osmoregulation? How is it maintained in human body?

 [Watch Video Solution](#)

45. Do you find any relationship between circulatory system and excretory system? What are they?

 [Watch Video Solution](#)

46. Give reasons.

Always vasopressin is not secreted.





[Watch Video Solution](#)

47. Give reasons.

When urine is discharged, in beginning it is acidic in nature later it become alkaline.



[Watch Video Solution](#)

48. Give reasons

Diameter of afferent arteriole is greater than efferent arteriole.



[Watch Video Solution](#)

49. Give reasons

Urine is slightly thicker in summer than in winter?



[Watch Video Solution](#)

50. Write differences between,

A. Functions of PCT and DCT

 [Watch Video Solution](#)

51. Write differences between kidney and artificial kidney.

 [Watch Video Solution](#)

52. Write differences between excretion and secretion.

 [Watch Video Solution](#)

53. Write differences between primary metabolites and secondary metabolites.

 [Watch Video Solution](#)

54. There is a pair of bean-shaped organs P in the human body towards the back just above the waist. A waste product Q formed by the decomposition of unused proteins in liver is brought into organ P through blood by an artery R. The numerous tiny filters S present in organ P clean the dirty blood, which goes into circulation through a vein T. The waste substance Q, other waste salts and excess water form a yellowish liquid U which goes from organ P into a bag-like structure V through two tubes W.

(i) This liquid is then thrown out of the body through a tube X. (ii) structure V



Watch Video Solution

55. There is a pair of bean-shaped organs P in the human body towards the back just above the waist. A waste product Q formed by the decomposition of unused proteins in liver is brought into organ P through blood by an artery R. The numerous tiny filters S present in organ P clean the dirty blood, which goes into circulation through a vein T. The waste substance Q, other waste salts and excess water form a yellowish liquid U

which goes from organ P into a bag like structure V through two tubes W
This liquid is then thrown out of the body through a tube X .Name (1)
artery R and (2) vein T



[Watch Video Solution](#)

56. There is a pair of bean-shaped organs P in the human body towards the back just above the waist. A waste product Q formed by the decomposition of unused proteins in liver is brought into organ P through blood by an artery R The numerous tiny filters S present in organ P clean the dirty blood goes into circulation through a vein T . The waste substance Q other waste salts and excess water form a yellowish liquid U which goes from organ P into a bag like structure V through two tubes W This liquid is then thrown out of the body through a tube X .Name (1) artery R and (2) vein T



[Watch Video Solution](#)

57. There is a pair of bean-shaped organs P in the human body towards the back just above the waist. A waste product Q formed by the decomposition of unused proteins in liver is brought into organ P through blood by an artery R. The numerous tiny filters S present in organ P clean the dirty blood, which goes into circulation through a vein T. The waste substance Q, other waste salts and excess water form a yellowish liquid U which goes from organ P into a bag-like structure V through two tubes W.

(i) This liquid is then thrown out of the body through a tube X. (ii) structure V



[Watch Video Solution](#)

58. The organ 'A' of a person has been damaged completely due to a poisonous waste material 'B' has started accumulation in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance 'E' which are kept in coiled form in a tank containing solution 'F'. This solution contains three materials 'G', 'H' and 'I' similar proportions to

those in normal blood. As the person's blood passes through long tubes of substance 'E', most of the wastes present in it go into solution 'F'. The clean blood is then put back into a vein in the person for circulation

What is organ A?

 [Watch Video Solution](#)

59. The organ of a person has been damaged completely due to a poisonous waste material B has started accumulation in his blood making it dirty. In order to save this person's life the blood from an artery in the person's arm is made to flow into long tubes made of substance E which are kept in coiled form in a tank containing solution F. This solution contains three materials G, H and I in similar proportions to those in normal blood. As the person's blood passes through long tubes of substance E, most of the wastes present in it go into solution F. The clean blood is then put back into a vein in the person for circulation. (i) F?

 [Watch Video Solution](#)

60. The organ of a person has been damaged completely due to a poisonous waste material B has started accumulation in his blood making it dirty In order to save this persons life the blood from an artery in the person s arm is made to flow Into long tubes made of substance E which are kept in coiled form in a tank containing solution F This solution contains three materials G , H and I in similar proportions to those in normal blood . As the person 's blood passes through long tubes of substance E, most of the wastes present in it go into solution . The clean blood is then put back into a I In the person for circulation. What are (i) E, and (II) F



[Watch Video Solution](#)

61. The organ of a person has been damaged completely due to a poisonous waste material B has started accumulation in his blood making it dirty In order to save this persons life the blood from an artery in the person s arm is made to flow Into long tubes made of substance E which are kept in coiled form in a tank containing solution F This solution contains three materials G H and I similar proportions to those in normal

blood As the person s blood passes through long tubes of substance E, most of the wastes present in it go into solution . The clean blood is then put back into a I In the person for circulation (i) F?



[Watch Video Solution](#)

62. The organ of a person has been damaged completely due to a poisonous waste material B has started accumulation in his blood making it dirty In order to save this persons life the blood from an artery in the person s arm is made to flow Into long tubes made of substance E which are kept in coiled form in a tank containing solution F This solution contains three materials G H and I similar proportions to those in normal blood As the person s blood passes through long tubes of substance E, most of the wastes present in it go into solution . The clean blood is then put back into a I In the person for circulation (i) F?



[Watch Video Solution](#)

63. Imagine what happens if waste materials are not sent out of the body from time to time.

 [Watch Video Solution](#)

64. To keep your kidneys healthy for long period what questions will you ask a nephrologist/urologist?

 [Watch Video Solution](#)

65. What are the gum yielding trees in your surroundings ? What procedure should you follow to collect gum from trees?

 [Watch Video Solution](#)

66. Collect the information about uses of different kinds of alkaloids, take help of Library or internet.



 [Watch Video Solution](#)

67. Draw a neat labelled diagram of L.S of kidney.

 [Watch Video Solution](#)

68. Describe the structure of Renal tubule with neatly labelled diagram.

Draw a diagram of a nephron and explain its structure.

 [Watch Video Solution](#)

69. Draw a block diagram showing the pathway of excretory system in human beings.

 [Watch Video Solution](#)

70. If you want to explain the process of filtration in kidney what diagram you need to draw.

 [Watch Video Solution](#)

71. List out the things that makes you amazing in excretory system of human being.

 [Watch Video Solution](#)

72. You read about 'Brain dead' in this chapter. What discussions would you like to have when you think so ?

 [Watch Video Solution](#)

73. We people have very less awareness about organ donation, to motivate people write slogans about donation.





[Watch Video Solution](#)

74. After learning this chapter (Excretion - The wastage disposing system) what habits would you like to change or follow for proper functioning of kidneys ?



[Watch Video Solution](#)

Fill In The Blanks

1. Earthworm excretes its waste material through



[Watch Video Solution](#)

2. The dark coloured outer zone of kidney is called



[Watch Video Solution](#)

3. The process of control of water balance and ion concentration within organism is called



[Watch Video Solution](#)

4. Reabsorption of useful product takes place in part of nephron.



[Watch Video Solution](#)

5. Gums and resins are the products of the plants.



[Watch Video Solution](#)

6. Bowman's capsule and tubule taken together make a _____.



[Watch Video Solution](#)

7. The alkaloid used for malaria treatment is _____.



Watch Video Solution

8. The principle involved in dialysis



Watch Video Solution

9. Rubber is produced from _____ of *Hevea braziliensis*.



Watch Video Solution

10. Who performed the first kidney transplantation?



Watch Video Solution

11. Earthworm excretes its waste material through



Watch Video Solution

12. The dark coloured outer zone of kidney is called



Watch Video Solution

13. The process of control of water balance and ion concentration within organism is called



Watch Video Solution

14. Reabsorption of useful product takes place in part of nephron.



Watch Video Solution

15. Gums and resins are the products of the plants.



Watch Video Solution

16. Bowman's capsule and tubule taken together make a _____.

 [Watch Video Solution](#)

17. The alkaloid used for malaria treatment is _____.

 [Watch Video Solution](#)

18. The principle involved in dialysis

 [Watch Video Solution](#)

19. Rubber is produced from _____ of *Hevea brasiliensis*.

 [Watch Video Solution](#)

20. _____ developed dialysis machine.



[Watch Video Solution](#)

Choose The Correct Answer

1. The structural and functional unit of human kidney is called

- A. Neuron
- B. nephron
- C. nephridia
- D. flame cell

Answer:



[Watch Video Solution](#)

2. The excretory organ in cockroach

A. malpighian tubules

B. raphids

C. ureters

D. nephridia

Answer:



[Watch Video Solution](#)

3. Which of the following is the correct path taken by urine in our body?

(i) Kidneys (ii) Ureters (iii) Urethra (iv) Urinary bladder ()

A. i, ii, iv, iii

B. i, ii, iii, iv

C. iv, iii, i, ii

D. ii,iii, i, iv

Answer:



[Watch Video Solution](#)

4. Malpighian tubes are excretory organs in ()

A. earth worm

B. house fly

C. flatworm

D. hen

Answer:



[Watch Video Solution](#)

5. Major component of urine is ()

A. urea

B. sodium

C. water

D. creatine

Answer:



[Watch Video Solution](#)

6. Special excretory organs are absent in ()

A. birds

B. amoeba

C. sponges

D. a and b

Answer:



[Watch Video Solution](#)

7. Which of the following hormone has direct impact on urination?

()

A. adrenal

B. vasopressin

C. testosterone

D. Oestrogen

Answer:



[Watch Video Solution](#)

8. Amber colour to urine due to ()

A. urochrome

B. bilirubin

C. biliverdin

D. chlorides

Answer:



[Watch Video Solution](#)

9. Sequence of urine formation in nephron is ()

A.

Glomerular filtration - Tubular reabsorption - Tubular secretion

B.

Tubular reabsorption - Tubular secretion - Glomerular filtration

C.

Tubular secretion - Glomerular filtration - Tubular reabsorption

D.

Tubular reabsorption - concentration of urine - Tubular secretion

Answer:



[Watch Video Solution](#)

10. Part of the nephron that exists in outer zone of kidney. ()

A. Loop of the henle

B. PCT

C. DCT

D. Bowman's capsule

Answer:



[Watch Video Solution](#)

11. After having lunch or dinner one can feel to pass urine, because of a

()

A. stomach pressures on bladder

B. solids become liquids

C. water content in food material

D. spincter relaxation

Answer:



[Watch Video Solution](#)

12. The excretory unit in the human excretory system is called

A. Neuron

B. nephron

C. nephridia

D. flame cell

Answer:



[Watch Video Solution](#)

13. The excretory organ in cockroach

A. malphigian tubules

B. raphids

C. ureters

D. nephridia

Answer:



[Watch Video Solution](#)

14. Which of the following is the correct path taken by urine in our body?

(i) Kidneys (ii) Ureters (iii) Urethra (iv) Urinary bladder ()

A. kidney ureters bladder urethra bladder

B. Kidney ureters bladder urethra

C. Kidney bladder ureters urethra

D.

Answer:

 [Watch Video Solution](#)

15. Malpighian tubes are excretory organs in ()

A. earth worm

B. house fly

C. flat worm

D. hen

Answer:

 [Watch Video Solution](#)

16. Major component of urine is

A. urea

B. sodium

C. water

D. creatine

Answer:



Watch Video Solution

17. Special excretory organs are absent in

A. birds

B. amoeba

C. sponges

D. a and b

Answer:



Watch Video Solution

18. Which of the following hormone has direct impact on urination?

()

A. adrenal

B. vasopressin

C. creatine

D. estrogen

Answer:



Watch Video Solution

19. Amber colour to urine due to

A. urochrome

B. bilerubine

C. bileverdine

D. chlorides

Answer:



[Watch Video Solution](#)

20. Sequence of urine formation in nephron is ()

- A. Glomerular filtration, Tubular reabsorption, Tubular secretion
- B. Tubular reabsorption, Tubular secretion, Glomerular filtration,
- C. Tubular secretion, Glomerular filtration, Tubular reabsorption
- D. Tubular reabsorption, concentration of urine, Tubular secretion

Answer:



[Watch Video Solution](#)

21. Part of the nephron that exists in outer zone of kidney. ()

- A. Loop of the henle

B. PCT

C. DCT

D. Bowman's capsule

Answer:



[Watch Video Solution](#)

22. After having lunch or dinner one can feel to pass urine, because of

A. stomach pressures on bladder

B. solids become liquids

C. water content in food material

D. sphincter relaxation

Answer:



[Watch Video Solution](#)

